

Claims

1. Microstructure comprising an adhesive layer (1) between a substrate (2) and a photo-patternable layer (4), the adhesive layer (1) being photosensitive and arranged on at least one face of the substrate (2), microstructure characterized in that the adhesive layer (1) is formed by a negative resin comprising at least one polymer of the elastomer family and at least one photo-initiating component, in solution in an aromatic solvent.
2. Microstructure according to claim 1, characterized in that the polymer is a cyclic polyisoprene in solution in xylene.
3. Microstructure according to one of the claims 1 and 2, characterized in that the adhesive layer (1) has a thickness comprised between 200nm and 10 μ m.
4. Microstructure according to any one of the claims 1 to 3, characterized in that the photo-patternable layer (4) is formed by at least one negative resin of epoxy type.
5. Microstructure according to any one of the claims 1 to 4, characterized in that the photo-patternable layer (4) has a thickness comprised between 50 μ m and 200 μ m.
6. Microstructure according to any one of the claims 1 to 5, characterized in that the substrate (2) is formed by a material chosen from silicon, glass and plastics.
7. Method of fabrication of a microstructure according to any one of the claims 1 to 6, characterized in that the method comprises spreading and drying of an adhesive layer (1) formed by a negative resin comprising at least one polymer of the elastomer family and at least one photo-initiating component, in solution in an

aromatic solvent, before deposition of at least one photo-patternable layer (4) of resin.

- 5 **8.** Fabrication method according to claim 7, characterized in that the adhesive layer (1) is exposed through a mask (3) and developed, before deposition of the photo-patternable layer (4).
- 10 **9.** Fabrication method according to claim 7, characterized in that the adhesive layer (1) and the photo-patternable layer (4) are exposed simultaneously through a mask (3).
- 10.** Fabrication method according to claim 9, characterized in that the photo-patternable layer (4) and the adhesive layer (1) are developed successively.
- 15 **11.** Fabrication method according to claim 7, characterized in that at least two photo-patternable layers (4, 7) are developed simultaneously, after having been successively deposited and exposed through two different masks (3, 8).